DOCUMENT RESUME

ED 178 607 TM 009 830

AUTHOR Gilbert, Arthur C. F.; And Others
TITLE Quality of ROTC Accessions to the Army Officer Corps.
PUB DATE 78
NOTE 7p.; Paper presented at the annual meeting of the Military Testing Association (20th, Oklahoma City, OK, October 30-November 3, 1978)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Differences; *Grades (Scholastic); Graduate Surveys; *Leadership Training; Military Training; *Officer Personnel; Personnel Evaluation; Personnel Selection; Postsecondary Education; *Recruitment; Regional Characteristics; Scholarships; Sex Differences
IDENTIFIERS *Reserve Officers Training Corps

ABSTRACT

Comparisons are made of the groups of Army officers that were procured through various programs and of various categories within the Army Reserve Officers' Training Program (ROTC). The criterion for these comparisons was the final course grades in the Officer Basic Courses (OBC) of the 13 career branches. Two samples were studied; one sample completed the course in 1977 and the other in 1974. For both samples, comparisons of mean course grades were made for ROTC graduates, Military Academy (West Point) graduates, Officer Candidate School graduates, and officers with direct appointments. In addition, for the 1977 sample, comparisons of mean grades were made for male and female officers, and for ROTC graduates from four regions of the United States. For both samples, scholarship recipients in ROTC were compared with non-recipients. Significance tests were made by analysis of variance. Conclusions indicated that although there were differences in grades of graduates from different institutions, the ROTC program was producing graduates whose quality was comparable to those from the other institutions. (CTM)

**********
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
**********

ED178607

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

# QUALITY OF ROTC ACCESSIONS TO THE ARMY OFFICER CORPS

by

Arthur C. F. Gilbert, Ph.D.
U. S. Army Research Institute for the Behavioral and Social Sciences

John I. Weldon, Jr., Ph.D.
U. S. Army Training and Doctrine Command

Richard S. Wellins, Ph.D.
U. S. Army Research Institute for the Behavioral and Social Sciences

A Paper Prepared for Presentation at the
20th Annual Conference of the Military Testing Association (MTA)
Oklahoma City, Oklahoma
October 30 - November 3, 1978

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Arthur C. F. Gilbert

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

TM 009 830

Performance and Training Research Laboratory
U. S. Army Research Institute for the Behavioral and Social Sciences
Alexandria, Virginia 22333

# QUALITY OF ROTC ACCESSIONS TO THE ARMY OFFICER CORPS

Arthur C. F. Gilbert, Ph.D.
U. S. Army Research Institute for the Behavioral and Social Sciences [1]

John I. Weldon, Jr., Ph.D.
U. S. Army Training and Doctrine Command

Richard S. Wellins, Ph.D.
U. S. Army Research Institute for the Behavioral and Social Sciences

The Army Reserve Officers' Training Program (ROTC) and the other officer procurement programs have to produce a sufficient number of officers to meet the requirements of the Army active and reserve components. Projections of future requirements appear to indicate that the ROTC program will need to double its number of graduates within the next few years in order to remain responsive to this need. As a consequence, the Professors of Military Science have been striving diligently to meet this objective by enrolling increasing numbers of students in the ROTC program. As in any personnel selection this, in turn necessitates a system, it is necessary to have a more stringent evaluation of the quality of accessions as more emphasis is being placed on quantity.

The objective of this research was to evaluate the quality of ROTC graduates and to determine if there were differences among ROTC graduates in performance on the basis of sex or on the basis of the geographical region in which the ROTC units are located. The criterion was the final course grades in the Officer Basic Courses (OBC) of the 13 Career Branches.

## Procedure

A sample of 1,243 officers who completed Officer Basic Course in the first and second classes after 15 June 1977 were used in this research. In addition, a sample of 4,662 officers who continued on active duty after completion of OBC in Fiscal Year 1974 were selected from a total of 9,180 officers who entered on active duty during that year.

TM 009830

---

[1] The views expressed in this paper are those of the author and do not necessarily reflect the views of the Army Research Institute or the Department of the Army.

Each sample was divided on the basis of sources of commission, ROTC, USMA, OCS, and direct appointments. The ROTC samples were divided into those officers who were ROTC scholarship recipients and those who were not. The ROTC sample for 1977 was divided into geographical regions corresponding to the location of the ROTC institution that they attended. Finally, the 1977 ROTC graduates were divided on the basis of sex.

## Results and Discussion

The means of the four groups of officers from the four procurement programs are shown in Table 1 for the 1977 sample. Also, the means of the different subgroups are presented (i.e., ROTC Scholarship recipients, ROTC region and male and female samples.).

The results of the analysis of variance among the four procurement programs was significant. The average final OBC grades for the four procurement programs ranked as follows: U. S. Military Academy, ROTC, OCS, and direct appointments. Even though the U. S. Military Academy graduates were favored, a meaningful difference in mean performance for that group and for ROTC graduates was not obtained. When the ROTC graduates are classified as ROTC scholarship recipients and non-recipients, the mean Officer Basic Course final grades of the graduates of the different programs ranked as follows: U. S. Military Academy graduates, ROTC scholarship recipients, non-recipients of ROTC scholarships, OCS graduates, and direct appointments.

When an analysis of variance was performed to detect differences among the four ROTC regions, a significant difference was obtained. The Western Region was favored in terms of average OBC final grades earned while the South Central Region had the lowest average performance. A significant difference did not exist between the mean performance of male ROTC graduates on the criterion measure.

ROTC units who had five or more graduates in the 1977 sample were ranked on the basis of average OBC final grades. Of the 70 ROTC units ranked, the average OBC final grades of 18 of the 70 institutions so ranked exceeded that of the average OBC final grades of graduates of the U. S. Military Academy. The average OBC performance graduating of 50 of the ROTC institutions exceeded that of the average performance of OCS graduates while the average performance of graduates of 54 ROTC institutions exceeded that of the average performance of those officers who received direct appointments.

The means of the Officer Basic Course final course grades for each of the four procurement programs in the Fiscal Year 1973 sample are shown in Table 2 as well as the mean performance of ROTC scholarship recipients and non-recipients. Results of analysis of variance revealed a significant difference in performance among the four groups.

TABLE 1

MEANS OFFICER BASIC COURSE FINAL GRADES
FOR THE DIFFERENT GROUPS IN THE
1977 SAMPLE OF OFFICER ACCESSIONS

| Group | N | $\bar{X}$ |
|---|---|---|
| U. S. Military Academy | 113 | 106.90 |
| ROTC | 871 | 100.34 |
| OCS | 132 | 96.22 |
| Direct Appointment | 61 | 94.37 |
| Total | 1,177* | 100.20 |
| ROTC Scholarship Recipients | 347 | 105.81 |
| Non-Recipients | 524 | 96.72 |
| Male ROTC Graduates | 814 | 100.48 |
| Female ROTC Graduates | 57 | 98.30 |
| Eastern ROTC Region | 341 | 98.13 |
| North Central ROTC Region | 188 | 101.99 |
| South Central ROTC Region | 155 | 96.83 |
| Western ROTC Region | 170 | 106.14 |

*All 1,243 cases were not used due to missing data elements.

TABLE 2

MEANS OF THE DIFFERENT PROCUREMENT

PROGRAM GROUPS IN THE FY 1974 SAMPLE

| Group | N | $\bar{X}$ |
|---|---|---|
| U. S. Military Academy | 591 | 99.04 |
| ROTC | 1,721 | 100.80 |
| OCS | 113 | 106.10 |
| Direct Appointment | 76 | 95.71 |
| Total | 2,501 | 100.47 |
| ROTC Scholarship Recipients | 598 | 102.54 |
| Non-recipients | 1,123 | 99.87 |

Graduates of OCS were favored over U. S. Military graduates and ROTC graduates while those officers who received direct appointments had the lowest mean OBC final course grades.

Those ROTC units who had five or more graduates in the Fiscal Year 1975 sample were rank-ordered on the mean Officer Basic Course final grades of the graduates. Inspection of these means revealed the means performance of 106 of the 235 institutions so ranked exceeded that of the mean performance of U. S. Military Academy graduates. The average performance of graduates of 37 ROTC institutions exceeded the average performance of OCS graduates in this sample while the average performance of 105 ROTC institutions exceeded the average OBC performance of officers who received direct appointments.

For the ROTC institution and that had five or more graduates both in the 1977 sample and in the Fiscal Year 1974 sample, the mean performance of the graduates were ranked within each sample. A Spearman rank order correlation coefficient was computed between the obtained values. The resulting correlation coefficient of .53 between these rankings was significant at the .01 level.

The results of this research indicate that the ROTC program is producing a quality of graduates whose performance in the Officer Basic Course is of comparable quality with other officer procurement programs. There appears to be a variability among the ROTC institutions in terms of the performance of graduates in Officer Basic Course but even so, the ROTC is meeting its objective of obtaining quality accessions for the officer corps. There appears to be a certain tendency for ROTC institutions that have produced graduates in Fiscal Year 1974 who performed well in Officer Basic Courses to do so again in 1977.